LED

Project:

Location:

Cat.No:

Type:

Lamps: Qty:

Notes:

Frame-in
Kit

Light
Engine

Finishing
Reflector

Complete product =
Frame-in Kit + Light Engine + Finishing Reflector

Frame-in Kit   example: C4LA15NUZ10VAIC

Series	Style	Lumens	Installation	Voltage	Dimming
C4L	**A**		**N**	**U**	
C4L Calculite 4" LED	**A** Adjustable Accent	**15** 1500lm **25** 2500lm	**N** New construction	**U** Universal 120V/277V	**Z10V** 1% dimming with Lightolier 0-10V driver **LD** Lutron L3DA Hi-Lume 1% EcoSystem LED Driver, w/3-wire 120/277V **LH** Lutron LDE1 Hi-lume 1% EcoSystem LED Driver w/ Soft-on and Fade-to-Black dimming, 120/277V

Light Engine   example: C4L15A30K8SP

Series	Lumens	Style	CCT	CRI	Optics
C4L		**A**			
C4L Calculite 4" LED	**15** 1500lm **25** 2500lm	**A** Adjustable Accent	**27K** 2700K **30K** 3000K **35K** 3500K[1] **40K** 4000K[1]	**8** 80 CRI **9** 90 CRI[1]	**TSP** 11° Tight Spot **SP** 17° Spot **NF** 22° Narrow Flood **FL** 29° Flood

Finishing Reflector   example: C4LACLW

| Series	Style	Finish	Flange
C4L	**A**		
C4L Calculite 4" LED	**A** Adjustable Accent	**CL** Clear **CCL** Comfort Clear **CCD** Comfort Clear Diffuse **CCZ** Champagne Bronze **WH** White (painted)	**W** White (painted) **P** Polished (matches aperture) **FT** Flangeless (flush-mount)[2]

1. Configurations using 90 CRI (9) are not compaitble with 3500K (35K) and 4000K (40K) CCTs.
2. Accessory CA4FMR required for gypsum applications (minimal ¼" reflector flange).
3. AIC frame not available in 2500lm configuration.

C4LA   Calculite LED 4"

Adjustable Accent

15 5/8"
397 mm

7 1/8"
181 mm

6 1/8"
155 mm

Complete product =
Frame-in Kit + Light Engine + Finishing Reflector

15 1/4"
387 mm

12 3/4"
324 mm

2 7/8"
73 mm

3/8"   1 3/4"
10 mm to 44 mm
ceiling thickness

4 1/8"
105 mm

5 1/2"
139 mm

16 3/8"
416 mm

15 5/8"
397 mm

Frame-in Kit

6 7/8"
174 mm

Light Engine

4 3/8"
111 mm

2 1/2"
57 mm

Finishing Reflector

7 1/2"
190 mm

7 1/8"
181 mm

Ø 3 3/8"
86 mm

Ø 5 3/8"
137 mm

Ø 4 5/8"
118 mm
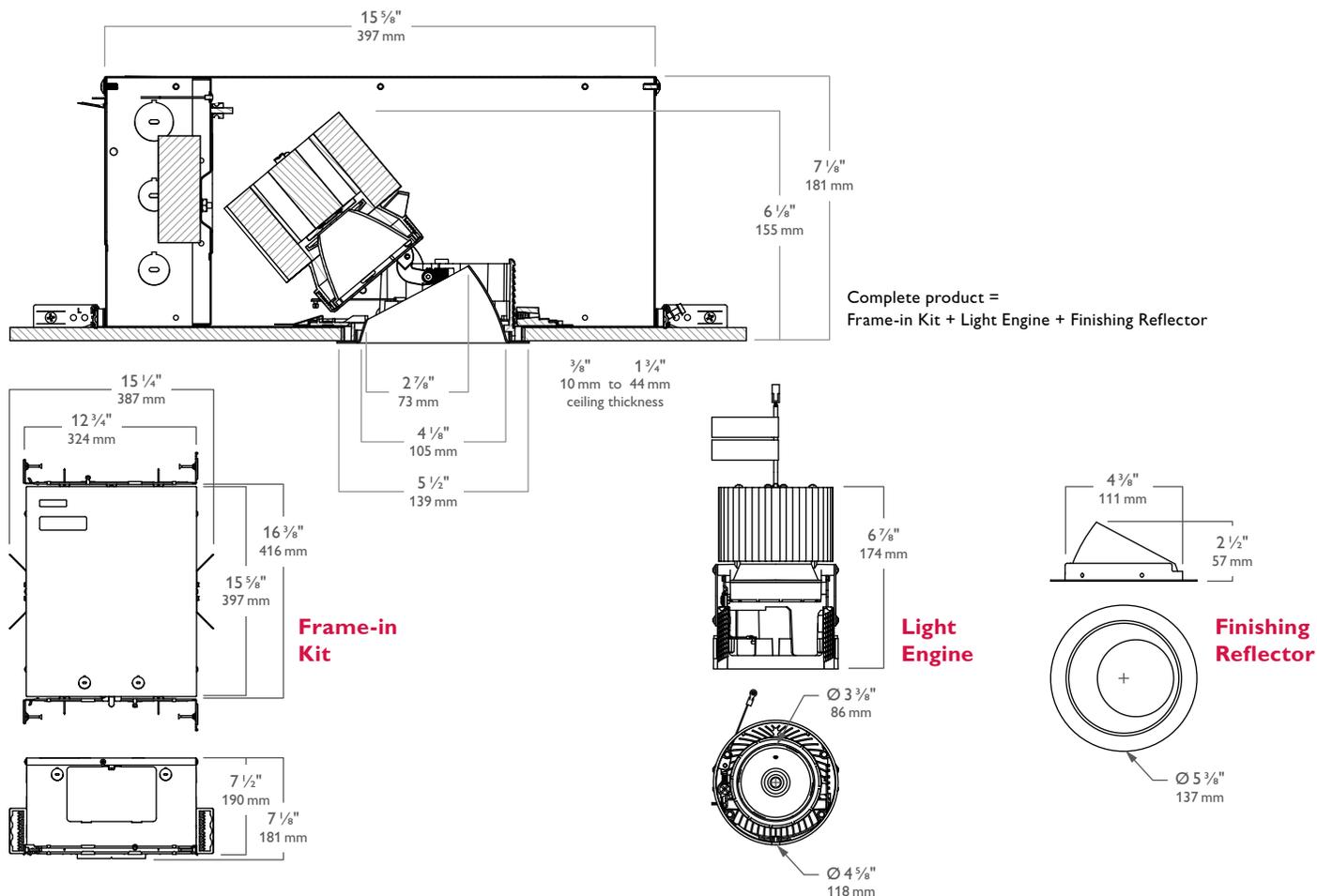
Features

1. **Finishing Reflector attachment:** Attaches to the Light Engine, which is keyed to ensure correct installation. Magnetic attachment helps to ensure Finishing Reflector is mounted flush with the ceiling and prevents gaps that can commonly occur with traditional friction spring installs. Allows for secure fit, but is much easier to remove/install when making adjustments.
2. **Steel cable tether:** Discrete tether fixed to the Light Engine body with snap in connector to Finishing Reflector body and holds securely while aiming unit or applying filters.
3. **Aperture Cone:** Low brightness; 0.050" aluminum, anodized; Self-flange in painted white or aperture matching polished flange. Flangeless option requires Mud-in Ring accessory.
4. **Light Engine retention:** mechanism is attached to Frame-in Kit by 3 symmetrically offset spring loaded ball and groove mating parts (patent pending).
5. **Light Engine vertical adjustment:**
   • Die-cast aluminum, 4 bar linkage design always maximizes accent light output at all angles through the 0°-40° vertical adjustment, while simultaneously minimizing glare within the cone.
   • EZ-Aim helical drive system provides fast and accurate hot aiming with phillips-head screwdriver. Vertical adjustment automatically locks once aiming is completed.
   • Unitized optics to ensure proper lamp orientation regardless of ceiling thickness.
   • Inherent aiming Indicator within Light Engine assembly (10° increments) to clearly identify respective angle of adjustment and allow for consistent aiming between fixtures if desired.

6. **Horizontal Adjustment Mechanism:** Die-cast aluminum ring with matte black finish. Unique design which allows for 366° horizontal rotation with positive stop and tool-less adjustment (patent pending).
7. **Light Engine Assembly:** LED light engine is particularly positioned to have 50° cut-off at nadir position for adjustable accent. LED Light engine traverses thru adjustment for ideal light source positioning and maximizing accent capability.
8. **Optics:**
   • 4 beam spread options available. Can be ordered separately as tool-less field replacements; Tight Spot 11°, Spot 17°, Narrow Flood 22°, and Flood 29°
   • 1 filter can be used. Up to 1/4" thick of standard 3 1/8" diameter accessories.
   • Custom engineered diffusion film (optional) helps smooth/diffuse/soften any beam spread.
9. **Thick Ceiling Ready Brackets:** Adj. Accent functions ideally tuned at 5/8" ceiling thicknesses, but is capable of being utilized in ceiling up to 2" thick with lessened adjustability.
10. **Frame Mounting:** Accommodates virtually any commercial installation with adjustable, pre-installed mounting brackets and user supplied 1/2" EMT Tubing or Lightolier purchased mounting bars. Additionally accommodates mounting to residential joist (steel or wood) construction spacing from 12" to 24" On Center (O.C.) joists with supplied mounting bars (Lightening Bars). Minimum joist height of 8" required.
11. **LED Driver:** Serviceable and Replaceable from below ceiling. Two compatible dimming technologies are available depending on driver option: 0-10 Volt, and 27W Lutron Dimming (Non-IC and IC).

12. **Frame-In Kit:** See Frame-In Kit specification sheets for more information. For Non-IC, insulation must be kept 3" away from any parts of the luminaire and must not be placed above luminaire in a manner which will entrap heat. For IC AirSeal, luminaire may be in direct contact with thermal insulation.

Optical Reflectors

CA4ATSP: 11° Tight Spot
CA4ASP: 17° Spot
CA4ANF: 22° Narrow Flood
CA4AFL: 29° Flood

Options and Accessories

LC20SF: 3 1/8" dia. diffusion filter for soft focus beam spreads
CA4FMRLED:: 4 13/16" dia. Mud-in ring for flangeless installations

Frame-in Kits
AirSeal: Integral to IC rated Frame-in Kit.
Chicago Plenum: Integral to IC rated Frame-in Kit.

Labels

cU.L.us (Suitable For Damp Locations), I.B.E.W. Energy Star (pending). With exceptions, the following configurations are not certified under Energy Star: C4LA15NUZ10VAIC, C4LA15NULDAIC, C4L15A27K9TSP, C4L15A27K9SP, C4L15A27K9NF, and C4L15A27K9FL.

CalculiteLED-4in-AdjAccent-C4LA   11/18   page 2 of 4

C4LA Calculite LED 4''

Adjustable Accent

CCT Adjust. factors	CRI Adjust. factors	Lumen Adjust. factor
102% = 4000K	100% = 80CRI	100% = 1500lm
100% = 3500K	82% = 90CRI	150% = 1500lm
96% = 3000K		
89% = 2700K		

30° Horizontal Aiming
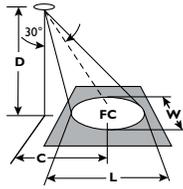
30° Vertical Aiming
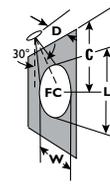
Example: Tight Spot, 2700K, 90CRI

Housing	Trim	Reflector
C4LA15NULD	C4L15A 27K 9 TSP	C4LACLW

$$31{,}939 \text{ cd CBCP} \times 89\% @ 2700K\ CCT \times 82\% @ 90\ CRI = 23{,}309 \text{ cd CBCP}$$

27W LED, 3500K, 11° Tight Spot

Candela Curves

6000
12000
18000
24000

Report no[1]: 258GFR

Output lumens:	1727 lms
CCT[2]:	3500K
Input watts[3]:	27.2 W
Efficacy:	63.5 lm/w
CRI:	80 min
Center Beam:	31,939 c.d.

30° Horizontal Aiming

Dist. (D)	Dist. (C)	F.C. (FC)	Beam Length (L)	Beam Width (W)
6	3.5	576	1.5	1.3
8	4.6	324	2.1	1.8
10	5.8	207	2.6	2.2
12	6.9	144	3.1	2.7

30° Vertical Aiming

Dist. (D)	Dist. (C)	F.C. (FC)	Beam Length (L)	Beam Width (W)
2	3.5	998	1.6	0.8
3	5.2	444	2.4	1.2
4	6.9	250	3.2	1.5
5	8.7	160	4.0	1.9
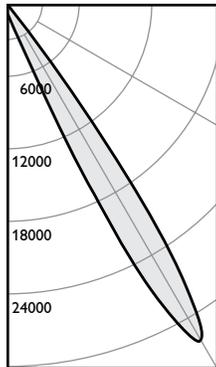
Frame: C4LA15NULD
Trim: C4L15A35K8TSP
Reflector: C4LACLW

27W LED, 3500K, 17° Spot

Candela Curves

2800
5600
8400
11200

Report no[1]: 259GFR

Output lumens:	1543 lms
CCT[2]:	3500K
Input watts[3]:	27.2 W
Efficacy:	56.7 lm/w
CRI:	80 min
Center Beam:	13,659 c.d.

30° Horizontal Aiming

Dist. (D)	Dist. (C)	F.C. (FC)	Beam Length (L)	Beam Width (W)
6	3.5	246	2.4	2.1
8	4.6	139	3.2	2.8
10	5.8	89	4.0	3.5
12	6.9	62	4.8	4.1

30° Vertical Aiming

Dist. (D)	Dist. (C)	F.C. (FC)	Beam Length (L)	Beam Width (W)
2	3.5	427	2.6	1.2
3	5.2	190	3.8	1.8
4	6.9	107	5.1	2.4
5	8.7	68	6.4	3.0
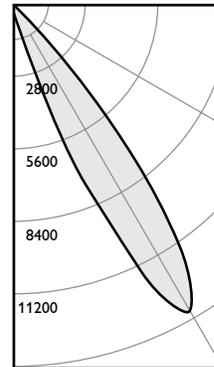
Frame: C4LA15NULD
Trim: C4L15A35K8SP
Reflector: C4LACLW

27W LED, 3500K, 22° Narrow Flood

Candela Curves

1800
3600
5400
7200

Report no[1]: 260GFR

Output lumens:	1442 lms
CCT[2]:	3500K
Input watts[3]:	27.2 W
Efficacy:	53.0 lm/w
CRI:	80 min
Center Beam:	9,103 c.d.

30° Horizontal Aiming

Dist. (D)	Dist. (C)	F.C. (FC)	Beam Length (L)	Beam Width (W)
6	3.5	164	3.1	2.7
8	4.6	92	4.2	3.6
10	5.8	59	5.2	4.5
12	6.9	41	6.3	5.4

30° Vertical Aiming

Dist. (D)	Dist. (C)	F.C. (FC)	Beam Length (L)	Beam Width (W)
2	3.5	284	3.5	1.6
3	5.2	126	5.3	2.3
4	6.9	71	7.0	3.1
5	8.7	46	8.8	3.9
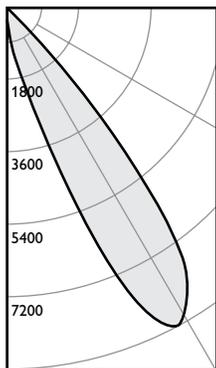
Frame: C4LA15NULD
Trim: C4L15A35K8NF
Reflector: C4LACLW

27W LED, 3500K, 29° Flood

Candela Curves

1000
2000
3000
4000

Report no[1]: 261GFR

Output lumens:	1474 lms
CCT[2]:	3500K
Input watts[3]:	27.2 W
Efficacy:	54.2 lm/w
CRI:	80 min
Center Beam:	5,648 c.d.

30° Horizontal Aiming

Dist. (D)	Dist. (C)	F.C. (FC)	Beam Length (L)	Beam Width (W)
6	3.5	102	4.2	3.6
8	4.6	57	5.6	4.8
10	5.8	37	7.1	6.0
12	6.9	25	8.5	7.2

30° Vertical Aiming

Dist. (D)	Dist. (C)	F.C. (FC)	Beam Length (L)	Beam Width (W)
2	3.5	177	5.2	2.1
3	5.2	78	7.8	3.1
4	6.9	44	10.4	4.1
5	8.7	28	12.9	5.2
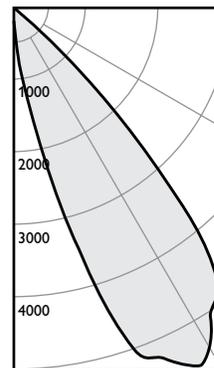
Frame: C4LA15NULD
Trim: C4L15A35K8FL
Reflector: C4LACLW

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1. Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products.
2. Correlated Color Temperature within specs as defined in ANSI_NEMA_ANSLG C78.377-2008: Specifications for the Chromaticity of Solid State Lighting Products.
3. Wattage controlled to within 5%.

The information presented in this document is not intended as any commercial offer and does not form part of any quotation or contract.

Signify